ROYAL VACATION HOMES WATER CORPORATION PWS # 7100076 SOURCE WATER ASSESSMENT FINAL REPORT

June 28, 2001



State of Idaho Department of Environmental Quality

Disclaimer: This publication has been developed as part of an informational service for the source water assessments of public water systems in Idaho and is based on data available at the time and the professional judgement of the staff. Although reasonable efforts have been made to present accurate information, no guarantees, including expressed or implied warranties of any kind, are made with respect to this publication by the State of Idaho or any of its agencies, employees, or agents, who also assume no legal responsibility for the accuracy of presentations, comments, or other information in this publication. The assessment is subject to modification if new data is produced.

June 28, 2001

Under the Federal Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency (EPA) to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the Act. The Idaho Department of Environmental Quality is completing the assessments for all Idaho public drinking water systems. The assessment for your particular drinking water source is based on a land use inventory within a 1,000 foot radius of your drinking water source, sensitivity factors associated with the source and characteristics associated with either your aquifer or watershed in which you live.

This report, *Source Water Assessment for Public Water System* # 7100076 describes the public drinking water system, the associated potential contaminant sources located within a 1,000` boundary around the drinking water source, and the susceptibility (risk) that may be associated with any associated potential contaminants. This assessment should be used as a planning tool, taken into account with local knowledge and concerns, to develop and implement appropriate protection measures for this system. The results should <u>not be</u> used as an absolute measure of risk and is not intended to undermine the confidence in your water system.

The Royal Vacation Homes Water Corporation's Ground drinking water system consists of one spring located outside the one hundred-year flood plain. This spring is ranked as low in susceptibility to potential contaminants. The final *low* ranking falls in the bacteria, VOC, SOC and IOC categories. The following considerations have been applied in determining your final spring ranking: hydrologic characteristics, physical integrity of the spring, land use characteristics, and the presence of potentially significant contaminant sources.

At this time, there are no potential contaminant sources identified within the delineated capture zone. It should be noted in evaluating your system's susceptibility to potential contaminants, that the Natural Resources Conservation Service (NRCS) classifies Bonneville County as a predominantly high farm-chemical use area; and therefore, stormwater from agricultural and recreational activities could be potential contaminants. Another factor that you should consider is your source water "spring" classification and the potential of contamination from surface water, which makes your system more susceptible to microbial (bacteria, protozoa) type contaminants. The existence of the chlorination system helps to minimize the risk of bacterial contamination.

These are only possible contaminant sources and are presently not a threat to your drinking water system. A copy of the susceptibility analysis for your system along with a map showing any potential contaminant sources is included with this summary. Information regarding the potential contaminants within the 1,000' boundary, if any, have been summarized and included in Table 1 on page three.

Table 1.

SITE #	Source Description	Source of Information	Potential Contaminants
1	No Potential Contaminant	Database Search	None
	Identified		

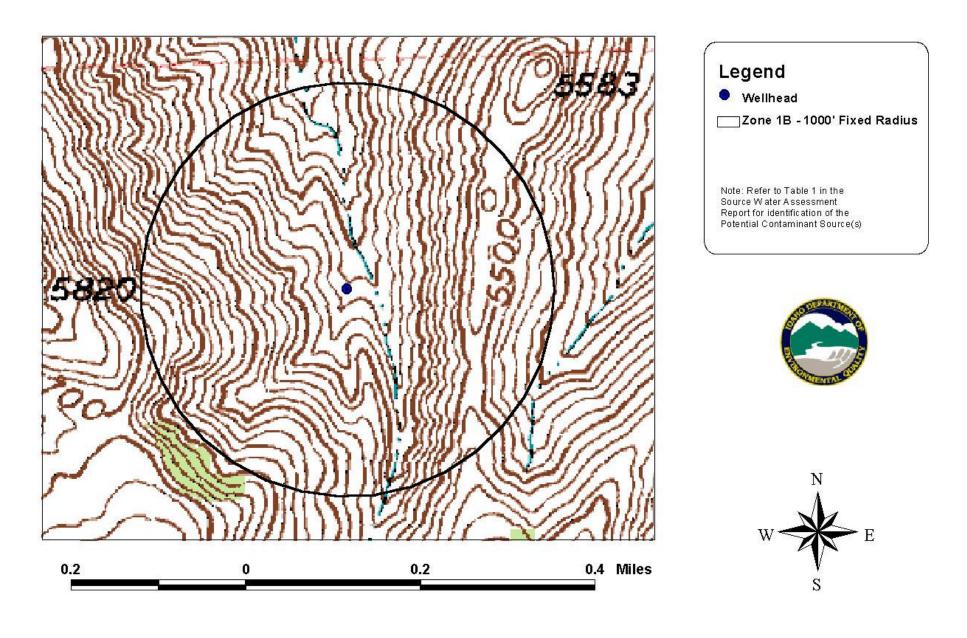
IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

For the Royal Vacation Homes Water Corporation, source water protection activities should focus on implementation of practices aimed at protecting the spring from surface water, proper maintenance of the chlorination system and addressing any and all of the recommendations made on the sanitary survey completed by District VII health department. You may want to establish a dialog with the appropriate state and local agencies in regards to possible leachable contaminants that may affect the spring. Source water protection activities should be aimed at long-term management strategies, even though these strategies may not yield substantial results in the near term.

For assistance in developing source water protection strategies please contact the Idaho Falls Regional (IDEQ) Office at (208) 528-2650.

Royal Vacation Home Water Corp.: Hinks Spring PWS Number: 7100076



POTENTIAL CONTAMINANT INVENTORY LIST OF ACRONYMS AND DEFINITIONS

<u>AST (Aboveground Storage Tanks)</u> – Sites with aboveground storage tanks.

<u>Business Mailing List</u> – This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

<u>CERCLIS</u> – This includes sites considered for listing under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). CERCLA, more commonly known as ASuperfund≅ is designed to clean up hazardous waste sites that are on the national priority list (NPL).

<u>Cyanide Site</u> – DEQ permitted and known historical sites/facilities using cyanide.

<u>Dairy</u> – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

<u>Deep Injection Well</u> – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (IDEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

<u>Group 1 Sites</u> – These are sites that show elevated levels of contaminants and are not within the priority one areas.

<u>Inorganic Priority Area</u> – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

<u>Landfill</u> – Areas of open and closed municipal and non-municipal landfills.

<u>**LUST (Leaking Underground Storage Tank)**</u> — Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

 $\underline{\text{Mines and Quarries}}$ – Mines and quarries permitted through the Idaho Department of Lands.)

<u>Nitrate Priority Area</u> – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System) – Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

<u>Organic Priority Areas</u> – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

<u>Recharge Point</u> – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

<u>Toxic Release Inventory (TRI)</u> – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

<u>UST (Underground Storage Tank)</u> – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

<u>Wastewater Land Applications Sites</u> – These are areas where the land application of municipal or industrial wastewater is permitted by IDEQ.

<u>Wellheads</u> – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.

The final scores for the *Royal Vacation Homes* water system's susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.27)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

Final Susceptibility Scoring:

- 0 5 Low Susceptibility
- 6 12 Moderate Susceptibility
- > 13 High Susceptibility

Public Water System Numb			,	5/15/2001	11:36:51 AM
. System Construction		SCORE			
Intake structure properly constructred	NO	1			
Infiltration gallery or well under the direct influence of Surface Water	NO	2			
	Total System Construction Score	3			
2. Potential Contaminant Source / Land Use		IOC Score	VOC Score	SOC Score	Microbial Score
Predominant land use type (land use or cover)	BASALT FLOW, UNDEVELOPED, OTHER	0	0	0	0
Farm chemical use high	NO	0	0	0	
Significant contaminant sources *	NO				
Sources of class II or III contaminants or microbials	not present	0	0	0	0
Agricultural lands within 500 feet	NO	0	0	0	0
Three or more contaminant sources	NO	0	0	0	0
Sources of turbidity in the watershed	NO	0	0	0	0
Total	Potential Contaminant Source / Land Use Score	0	0	0	0
3. Final Susceptibility Source Score		3 	3	3 	3
Final Sourcel Ranking		Low	Low	Low	Low

ROYAL VACATION HOME WATER CORP

Well# : HINCKS SPRING

Public Water System Name :

Surface Water Susceptibility Report

^{*} Special consideration due to significant contaminant sources

The source water has no special susceptibility concerns